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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/580,825

05/26/2006

Roger Stave

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EXAMINER

BEACH, THOMAS A

ART UNIT

PAPER NUMBER

3671

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/580,825	Applicant(s) STAVE, ROGER	
	Examiner THOMAS A. BEACH	Art Unit 3671	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 37-41 is/are allowed.
- 6) ☒ Claim(s) 11-36 and 42-45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 May 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 11-36 and 42-45 are rejected under 35 U.S.C. 102(b) as being anticipated by Beynet 4,063,602. Beynet shows the method of controlling drilling fluid pressure during drilling offshore, including flowing drilling fluid down into a borehole in a sea bed beneath a body of water (fig 1); flowing drilling fluid 35 back out of the borehole and into a conduit 16, wherein the conduit also contains a volume of riser fluid 33, wherein the riser fluid, has a different density than the drilling fluid, and wherein the volume of the riser fluid is located above the drilling fluid starting at a demarcation zone 43 between the two fluids in the conduit; and regulating a distance between a first level and the demarcation zone while flowing drilling fluid into the borehole and out of the borehole and into the conduit (fig 1).

As concerns claim 12, Beynot shows removing drilling fluid from the conduit utilizing a pump 43 with an inlet in fluid communication with the conduit; and regulating a pressure of the drilling fluid at the inlet to regulate the distance between the first level and the demarcation zone.

As concerns claims 13-14, Beynot shows regulating the pressure at the inlet to be substantially constant (col. 2, lines 27+) and and regulating the pressure at the inlet to be substantially constant so that the distance between the first level and the demarcation zone is substantially constant (fig 20).

As concerns claim 15, Beynot shows the method of drilling offshore, comprising: generating drill cuttings inside a borehole; and executing claim 11 to transport the drill cuttings out of the borehole with the drilling fluid (fig 1).

As concerns claim 16, Beynot shows removing drilling fluid from the conduit utilizing a pump 42 with an inlet in fluid communication with the conduit; and controlling drilling fluid pressure 43 of the drilling fluid in the conduit at the first level by controlling the pressure of the drilling fluid at the inlet (fig 1).

As concerns claim 17, Beynot shows removing drilling fluid from the conduit (fig 1); and controlling drilling fluid pressure of the drilling fluid in the conduit at the first level by controlling the pressure of drilling fluid removed from the conduit (fig 2).

As concerns claim 18, Beynot shows monitoring (with 43) a quantity of riser fluid flowing into and out of the conduit.

As concerns claim 19, Beynot shows comparing a quantity of drilling fluid and riser fluid flowing into and out of the conduit with a quantity of drilling fluid flowing into the borehole.

As concerns claim 20, Beynot shows the riser fluid 33 has a lower density (lightweight) than the drilling fluid 35.

As concerns claim 21, Beynot shows removing drilling fluid from the conduit with a pump 42 by pumping drilling fluid from the conduit through an inlet of the pump; and regulating the distance between the first level and the demarcation zone by regulating pressure at the inlet of the pump 43.

As concerns claim 22, Beynot shows decreasing the distance between the first level and the demarcation zone by lowering the pressure at the inlet of the pump 43a.

As concerns claim 23, Beynot shows raising the pressure at the inlet of the pump to increase the distance between the first level and the demarcation zone (fig 2).

As concerns claim 23-36, Beynot shows executing the claims above; drilling into the sea bed for petroleum; and producing petroleum (fig 1 & 2).

As concerns claim 42, Beynot shows the method of controlling drilling fluid pressure during drilling offshore, comprising: flowing drilling fluid down into a borehole in a sea bed beneath a body of water; flowing drilling fluid back out of the borehole and into a conduit, wherein the conduit also contains a volume of riser fluid 33, wherein the riser fluid is different than the drilling fluid 35, and wherein the volume of the riser fluid is located above the drilling fluid starting at a demarcation zone between the two fluids in the conduit; and regulating a distance between a first level and the demarcation zone

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while flowing drilling fluid into the borehole and out of the borehole and into the conduit 43, wherein the first level is at an outlet of the conduit through which the drilling fluid is extracted from the conduit 42.

As concerns claim 43, Beynot shows: removing the drilling fluid from the conduit through the outlet utilizing a pump 42 with an inlet in fluid communication with the outlet; and regulating a pressure of the drilling fluid at the inlet to regulate the distance between the first level and the demarcation zone.

As concerns claim 44, Beynot shows method of producing petroleum, comprising: executing claim 42; drilling into the sea bed for petroleum; and producing petroleum.

As concerns claim 45, Beynot shows the first level is about at a level of the sea bed (fig 1).

Allowable Subject Matter

3. Claims 37-41 are allowed.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas A. Beach whose telephone number is

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571.272.6988. The examiner can normally be reached on Monday-Friday, 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Will can be reached on 571.272.6998. The fax phone number for the organization where this application or proceeding is assigned is 571.273.8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thomas A. Beach

/Thomas A Beach/
Primary Examiner, Art Unit 3671

March 18, 2009

THOMAS A. BEACH
Primary Examiner
Group 3600